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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/473,963	12/29/1999	KOICHI SANO	P341-9013	1678

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EXAMINER

LONSBERRY, HUNTER B

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 03/31/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/473,963

Applicant(s)

SANO ET AL.

Examiner

Hunter B. Lonsberry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 12/26/02 have been fully considered but they are not persuasive.

1)" The information processor hardware driver of the present invention is not for interpreting the input from an external hardware.... Accordingly, Applicants respectfully request the withdrawal of the rejection on, it is submitted that the information processor hardware driver of the present invention is not the same as the driver disclosed in Kikuchi. More specifically, the device in Kikuchi is used to interpret the input from an interface such as the controller, mouse or trackball. The information processor hardware driver of the present invention is not for interpreting the input from an external hardware." (Page 6)

Regarding applicants argument 1, Claims 1 and 3, merely require the hardware driver to efficiently handled hardware resources in the information processor, able to be configured by a driver program and data, and able to use subroutines and tasks according to function calls by the application software engine. The claims are silent as to whether or not the driver accesses an interface external to the device. As such, Kikuchi is a valid reference under 35 U.S.C. 103(a).

2) "In Figure 1, of Kikuchi, the CPU 1 acts as a bus master for the bus 2, thus issues control signals as the address and the read/write signal to the bus. As a result, the graphics processor and the audio processor are merely bus slaves which receive

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the address and the control signals from the bus. Therefore, the CPU, graphics processor, and the audio processor do not share the same main memory." (Page 6).

Regarding applicants argument 2, Kikuchi discloses that the game program data, audio information and video information is supplied to decoder 17 which then error corrects the information and supplies the information to main memory 5, the video and audio information is then supplied to audio processor 13 or graphics processor 10, each processor may then write it to the buffer (column 7, line 66-column 9, line 37). CPU 1, main memory 5, graphic processor 10 and audio processor 13 are all connected to a common bus 2 (Figure 1, column 5, lines 30-53).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2 and 4 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In particular, the newly added limitation of "...sharing said semiconductor memory as bus masters;" (claim 2, line 6, claim 4, line 6) is not supported in the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,227,973-B1 to Kikuchi.

Regarding claim 1, Kikuchi discloses in Figure 1, a video game system which outputs video and audio signals to a home TV set with the system comprised of: a man-machine interface (controller 22, interface 4, column 6, lines 24-26), a semi conductor memory (ROM 6), and an information processor (CPU 1). The man-machine interface converts input from buttons pressed on controller 22 or input on interface 4 into electrical signals, ROM 6 stores the operating system used to direct CPU 1 and administer resources and interrupt control (column 6, lines 26-29), a man-machine interface driver 1a (column 9, lines 23- 24) to efficiently deliver electrical signals from the man-machine interface to the application software being run by the CPU 1, application software engine read from recording medium 30 (column 8, lines 50-56) for instructing the CPU to perform a number of tasks and subroutines, the application software program includes data which is handled by the CPU and application software (column 8, lines 54-56, column 9, lines 2-7), and the CPU performs operations based upon audio and video data from the application software as well as input from the

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controller (column 9, lines 2-18). Kikuchi inherently uses an "information processor hardware driver" as the information processor (which the examiner equates to the CPU 1 of Kikuchi, see Kikuchi, Figure 1) requires the use of some stored executable code to read and interpret the input from controller 22 or interface 4, which Kikuchi discloses may be a mouse or track ball (see above), otherwise the user would be unable to interact with the disclosed video game system of Kikuchi because the information processor would be unable to interpret any input. Kikuchi does not disclose the use of a single semiconductor memory coupled to the CPU but instead stores the operating system in a ROM 6 and reads application software from a main memory 5 (column 9, lines 2-5). Additionally, Kikuchi discloses that when the video game system is used for business use then all of the components disclosed in Figure 1, which includes the semiconductor memory containing the application software as well as ROM 6 on which the operating system is stored (column 5, lines 54-62, column 8, lines 15-25) may be encased in a single housing. The examiner takes official notice that it is well known in the art to store application software, drivers, and operating system on the same memory device (for example: a personal computer hard drive). Therefore it would have been obvious to one skilled in the art, at the time of invention to modify Kikuchi to store the application software, drivers, and operating system on a semiconductor memory to reduce the complexity of the device and reduce loading times, as all the software would be stored in the same memory.

Regarding claim 2, Kikuchi discloses in Figure 1 a video game system with a CPU 1, a graphics processor 10, and audio processor 13: CPU 1, audio processor 13

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and graphic processor 10 all share Main Memory 5 (column 8, lines 64-column 9, line 5), the CPU 1 controls graphics processor 10 and audio processor 13 based on electrical signals generated by a player on controller 22 (column 9, lines 5-8) and application software (column 8, lines 50-54), the graphics processor has the ability to generate image information (column 8, lines 54-63), and the sound processor has the ability to generate sound information (column 7, line 66-column 9, line 14).

Regarding claim 3, Kikuchi discloses in Figure 1, a video game system which outputs video and audio signals to a home TV set comprised of: a man-machine interface (controller 22, interface 4, column 6, lines 24-26), a semi conductor memory (ROM 6), and an information processor (CPU 1). The man-machine interface converts input from buttons pressed on controller 22 or input on interface 4 into electrical signals, ROM 6 stores the operating system used to direct CPU 1 and administer resources and interrupt control (column 6, lines 26-29), a man-machine interface driver 1a(column 9, lines 23- 24) to efficiently deliver electrical signals from the man-machine interface to the application software being run by the CPU 1, application software engine read from recording medium 30 (column 8, lines 50-56) for instructing the CPU to perform a number of tasks and subroutines including scripts (Figures 6-8, column 11, lines 53-62), the application software program includes data which is handled by the CPU and application software (column 8, lines 54-56, column 9, lines 2-7), and the CPU performs operations based upon audio and video data from the application software as well as input from the controller (column 9, lines 2-18), these inputs are used to execute tasks as defined in scripts stored in ROM 6 (Figures 6-8, column 11, lines 53-62. The

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application software utilizes and executes the script language code to configure the software application code and runs on the CPU (column 11, line 63-column 12, line 10). Kikuchi's system inherently contains an "information processor hardware driver" for controlling and allocating hardware resources within the system as drivers are required to operate the hardware within the device since they act like a translator between the device and programs that use the device and thus are essential for device operation.

Regarding claim 4, Kikuchi discloses a television game device, in Figure 1, which contains a CPU 1, graphics processor 10, and audio processor 13, all of which share main memory 5, the CPU 1 controlling graphics processor 10 and audio processor 13 based upon electrical signal received from controller 22 and program code from memories 5, 6 (column 8, line 47-column 9 line 18). The graphics processor has the ability to generate image information (column 8, lines 54-63), and the sound processor has the ability to generate sound information (column 7, line 66-column 9, line 14).

Regarding claim 7, Kikuchi discloses that the video game system composed of a man-machine interface 22, semiconductor memory 5, 6, and CPU 1 are incorporated in a single apparatus (column 5, lines 34-62).

Regarding claim 8, Kikuchi discloses that the video game system composed of a man-machine interface 22, semiconductor memory 5, 6, and CPU 1 are incorporated in a single apparatus (column 5, lines 34-62).

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,227,973-B1 to Kikuchi in view of U.S. Patent 6,227,974-B1 to Eilat.

Regarding claim 5, Kikuchi discloses a video game system in which CPU 1 performs operations based upon audio and video data from the application software as well as input from the controller (column 9, lines 2-18), these inputs are used to execute tasks as defined in scripts stored in ROM 6 (Figures 6-8, column 11, lines 53-62.

Kikuchi does not disclose the use of a general communications line capable of transmitting and receiving data and or a program through a general communications line or having the CPU perform an operation based upon data and or a program obtained through the communications line. Eilat discloses in Figure 2 a video game system that includes a telephone modem 104 for receiving data in order to play the game (column 15, line 66-column 16, line 3). Therefore it would have been obvious to one skilled in the art at the time of invention to modify Kikuchi to include the modem and communications line of Eilat to provide additional data to the CPU to allow a user to play a game with other users, download additional gaming programs or levels to be used on the video game system, or to provide an internet terminal capability to the user without the need for additional hardware.

Regarding claim 6, Kikuchi discloses a video game system in which CPU 1 performs operations based upon audio and video data from the application software as well as input from the controller (column 9, lines 2-18), these inputs are used to execute tasks as defined in scripts stored in ROM 6 (Figures 6-8, column 11, lines 53-62.

Kikuchi does not disclose the use of a general communications line capable of transmitting and receiving data and or a program through a general communications line or having the CPU perform an operation based upon data and or a program

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obtained through the communications line. Eilat discloses in Figure 2 a video game system that includes a telephone modem 104 for receiving data in order to play the game (column 15, line 66-column 16, line 3). Therefore it would have been obvious to one skilled in the art at the time of invention to modify Kikuchi to include the modem and communications line of Eilat to provide additional data to the CPU to allow a user to play a game with other users, download additional gaming programs or levels to be used on the video game system, or to provide an internet terminal capability to the user without the need for additional hardware.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,634,848 to Tsuda: Video Game System.

U.S. Patent 5,532,923 to Sone: Karaoke Network System Serving Spare Events During Idling Time.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 703-305-3234. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5359 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

HBL
March 18, 2003


ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600